Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-25. (Canceled)

26. (Currently Amended) A method for treating fumes generated during [[the]] production, conversion and/or handling of heated products of petroleum origin, ~~such as hydrocarbons, asphalts and bituminous hot mixes,~~ comprising the steps of ~~wherein it implies~~:

[[-]] introducing ~~the introduction of~~ said fumes into a reactor in which the fume components undergo free radical degradation by cold plasma generated in the reactor by [[the]] introduction of air through at least one dielectric ~~barrier~~ discharge member arranged close to at least one of the reactor walls which extend parallel to a [[the]] flow direction of the fumes passing through the reactor,

wherein the reactor is configured such that the fumes introduced into the reactor are degraded by active species generated in the reactor by the air introduced through the at least one dielectric discharge member, such that the fumes do not directly contact the at least one dielectric discharge member, and

[[-]] retaining ~~the retention of the~~ reaction products generated in the reactor from [[the]] free radical entities resulting from [[the]] degradation of the fume components with ~~components, using~~ at least one appropriate trapping device.

27. (Previously Presented) The method as claimed in claim 26, wherein the fumes are introduced by a carrier air stream.

28. (Currently Amended) The method as claimed in claim 26, wherein at least one dielectric ~~barrier~~ discharge member is present close to each side wall of the reactor.

29. (Currently Amended) The method as claimed in claim 26, wherein the trapping device comprises at least one fluidized bed of a ~~an advantageously~~ mineral medium.

30. (Currently Amended) The method as claimed in claim 29, wherein said medium is a granular material ~~advantageously~~ containing alumina, silica, or calcite.

31. (Currently Amended) The method as claimed in claim 29, wherein said medium is a microporous granular material comprising ~~such as~~ zeolite or pumice.

32. (Currently Amended) The method as claimed in claim 29, wherein said medium is a basic granular material comprising ~~such as~~ pozzolan or a carbonate type rock.

33. (Currently Amended) The method as claimed in claim 29, wherein a [[the]] size of said medium is between 0.5 mm and 20 mm~~, advantageously between 1 mm and 10 mm~~.

34. (Previously Presented) The method as claimed in claim 29, wherein the fluidized bed is fixed or circulating.

35. (Currently Amended) The method as claimed in claim 26, wherein another dielectric ~~barrier~~ discharge member is located close to an outlet of the reactor ~~outlet~~, ~~advantageously~~ placed perpendicular to the flow direction of the fumes passing through the reactor.

36. (Currently Amended) The method as claimed in claim 26, further comprising ~~wherein it further comprises~~, at an outlet of the reactor ~~outlet~~, a step of degrading ~~degradation of~~ the residual ozone formed in the reactor by the passage of the air through the at least one dielectric barrier member ~~discharge(s)~~.

37. (Currently Amended) The method as claimed in claim 26, further comprising ~~wherein it further comprises~~ an at least partial recirculation of [[the]] purified gases located in a [[the]] gas stream leaving the reactor to an inlet of the reactor [[inlet]], in a mixture with the fumes to be treated.

38. (Currently Amended) A device for treating fumes generated during [[the]] production, conversion and/or handling of heated products of petroleum origin~~, such as hydrocarbons, asphalts and bituminous hot mixes,~~ in a reactor [[(1)]] comprising:

[[-]] at least one fume introduction system [[(2)]] in a [[the]] lower part of the reactor [[(1)]],

[[-]] at least one dielectric discharge member that replaces ~~(3) replacing~~ at least part of at least one reactor wall ~~of the reactor walls (1)~~ which extends ~~extend~~ parallel to a [[the]] flow direction of [[the]] fumes passing through the reactor,

[[-]] at least one system for introducing air [[(4)]] through said at least one dielectric discharge member ~~member(s)~~,

wherein the device is configured such that fumes introduced into the reactor are degraded by active species generated in the reactor by the air introduced through the at least one dielectric discharge member, such that the fumes do not directly contact the at least one dielectric discharge member,

[[-]] at least one appropriate trapping device configured to retain ~~(5) for retaining the~~ reaction products generated in the reactor, and

[[-]] at least one discharge stack [[(6)]].

39. (Currently Amended) The device as claimed in claim 38, wherein the fume introduction system [[(2)]] contains a Venturi [[(2')]].

40. (Currently Amended) The device as claimed in claim 38, wherein the at least one dielectric discharge member ~~member(s) (3)~~ is a ~~(are) made in the form of~~ modulable cassette ~~cassettes each~~ consisting of a plurality of parallel electric tubes [[(7)]], said electric tubes each consisting of electric wires [[(8)]] sheathed in a dielectric insulation [[(9)]] and supplied by a high voltage generator.

41. (Currently Amended) The device as claimed in claim 38, wherein the electric wires comprise ~~(8) are of~~ copper.

42. (Currently Amended) The device as claimed in claim 38, wherein the dielectric insulation comprises ~~(9) is of~~ quartz, ceramic or glass.

43. (Currently Amended) The device as claimed in claim 38, wherein a [[the]] diameter of the dielectric insulation sheath [[(9)]] is between 2 and 10 mm.

44. (Currently Amended) The device as claimed in claim 38, wherein a [[the]] space between the parallel electric tubes [[(7)]] is between 1 and 2 mm.

45. (Currently Amended) The device as claimed in claim 38, wherein the at least one dielectric discharge member comprises dielectric discharge members that ~~(3) is present to~~ replace at least part of each side wall of the reactor [[(1)]], wherein said dielectric discharge members are ~~(3) being advantageously~~ arranged in a face-to-face layout.

46. (Currently Amended) The device as claimed in claim 38, wherein the trapping device [[(5)]] comprises at least one fluidized bed of a ~~an advantageously~~ mineral medium.

47. (Currently Amended) The device as claimed in claim 38, further comprising ~~wherein it further comprises~~ at least one filter ~~means (10, 11)~~ in an [[the]] upper part of the reactor [[(1)]] before the discharge stack [[(6)]].

48. (Currently Amended) The device as claimed in claim 38, further comprising ~~wherein it further comprises~~ at least one dielectric discharge member [[(3),]] in an [[the]] upper part of the reactor [[(1),]] before the discharge stack [[(6)]].

49. (Currently Amended) The method of claim 29, wherein ~~Use of the method as claimed in claim 29 or of the device as claimed in claim 46, in which~~ the trapping device [[(5)]] comprises at least one fluidized bed of granular materials, and further comprising a step of treating ~~in the preparation of~~ an aggregate used in ~~the production of~~ a roadbuilding product.

50. (Currently Amended) ~~Use as claimed in claim 49, wherein the~~ A roadbuilding product comprising [[is]] a hot mix or a bituminous mix treated by the method of claim 26.

51. (New) The method as claimed in claim 26, wherein the heated products of petroleum origin comprise hydrocarbons, asphalts, and bituminous hot mixes.

52. (New) The method as claimed in claim 33, wherein the size of said medium is between 1 mm and 10 mm.

53. (New) The device as claimed in claim 38, wherein a long axis of the at least one dielectric discharge member extends parallel to the flow direction of the fumes passing through the reactor.